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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/533,953	05/04/2005	Hiroshi Kawato	271725US0PCT	9608
22850 7590 08/20/2009 OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P. 1940 DUKE STREET ALEXANDRIA, VA 22314				
EXAMINER MCCLENDON, SANZA L				
ART UNIT 1796		PAPER NUMBER		
NOTIFICATION DATE 08/20/2009		DELIVERY MODE ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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### Office Action Summary

**Application No.**

10/533,953

**Applicant(s)**

KAWATO ET AL.

**Examiner**

Sanza L. McClendon

**Art Unit**

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 May 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3 and 5-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)  
Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

1. In response to the Amendment received on May 28, 2009, the examiner has carefully considered the amendments.

### ***Response to Arguments***

2. Applicant's arguments filed May 28, 2009 have been fully considered but they are not persuasive. Applicant appears to be arguing the cited reference (Takagi et al) in the rejection of claims 1-3 and 6-13 fails to suggest all the limitations of independent claims 1 and 11, specifically the limitation regarding the coated titanium particles having water extractable alkali metal and alkaline-earth metal cations and wherein said cations are extracted in water in a total amount of 120 mass ppm or lower. Applicant argues the instant invention reduces its total amount of alkali metal cations by washing with pure water using a filtering/cleaning operation that is repeated five times as can be seen in the specification at pages 15, lines 17-18 and examples 1-8. This is distinguished from the references, as argued by applicant, since Takagi et al fails to suggest washing the coated particle to reduce the alkaline metal cation content. Applicant argues that the water washing steps found in column 22, line 56 to column 23, line 2 is silent with regard to the amount of alkali metal cations and therefore does not teach and/or suggest the instantly claimed composition. This not persuasive since applicant is arguing process step and the claim is a composition claim. Additionally, as written the claim only has to have coated titanium particles that are capable, i.e. can have the ability of having the alkaline-earth and alkali metal cation extracted to this total amount. It is deemed that the cited reference Takagi et al does teach coated titanium oxide comprises alkali-metal and alkaline-earth metal cations (PC-3 and CR-63). Therefore without further evidence it is deemed the teachings of the

cited reference still read on the instantly claimed invention--see below. Regarding new claims 14-18, it is deemed that these are read in the reference and therefore will be added to the rejection. Takagi et al sets forth the thermoplastic resin can be used in amounts from 50-100% by weight in the composition--see column 6. The particles sizes (claims 15-16) are meet see the examples. Takagi et al sets forth the crystal structure of the titanium component is preferably rutile type--see column 22, line 25.

***Claim Rejections - 35 USC § 102******Claim Rejections - 35 USC § 103***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).\

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having

ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-3 and 6-18 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Takagi et al (6,956,073).

Takagi et al sets forth a composition comprising A) an aromatic polycarbonate resin from 50-100% by weight and a styrene containing resin from 0 to 50% by weight; B) a flame retardant having a phosphoric-ester group; C) a titanium dioxide pigment, D) an inorganic filler, F) a fluorine-containing compound and other additives. The titanium dioxide pigment can be found in amounts from 0.5 to 10 parts by weight. The titanium dioxide is preferably surface treated with an inorganic surface treating agent, such as aluminum oxide or others, such as silicon, titanium, zirconium, antimony, zinc or tin—see column 23, lines 10-15. Takagi et al sets forth coated titanium dioxide has a TiO<sub>2</sub> content of 89-98% and an inorganic coating of aluminum oxide from 0.5 to 4.5%, for example—see column 22, lines 43-55. In the method of making said coated TiO<sub>2</sub>, Takagi et al is coated, neutralized, by-products removed and washed in pure water, dried and then milled—see columns 22, lines 60 to column 23, line 3. Additionally, Takagi et al teaches said inorganic coated TiO<sub>2</sub> can be further surface treated with organic surface-agents, such as alkoxysilanes, amines and polyols—see column 23, lines 30-55. Said organic surface treatment can be added in amounts of 1% by weight based on 100% by weight of the inorganic surface coated titanium oxide. Other components in the composition can include breaking inhibitors for the inorganic filler, such as polyorganosiloxanes—see column 25, lines 5-10. Other additives (E) include mold release agents, such as organosiloxanes—see column 29, line 25. Takagi et al sets forth said compositions can be used to make molded articles via injection molding processes—see column 33, lines 5-18. Per example 12, in Table 1, Takagi et al teaches using aluminum coated titanium particle under the tradename TIPAQUE PC-3 as well as others. It is deemed that these, along with the teachings found in the disclosure regarding the TiO<sub>2</sub> content and the surface coating content (see column 22, lines 43-55) should inherently have the same extractable content as claimed when washed in water since these meet the definition for the TiO<sub>2</sub> as claimed.

In the alternative, Takagi et al does not expressly teach that said coated particles have extractable cations in amounts from 120 ppm or lower, such as found in claims 1, 3, 6, 10 or 11. However, per example 12, in Table 1, Takagi et al teaches using aluminum coated titanium

particle under the tradename TIPAQUE PC-3, as well as, others. And since the Patent and Trademark Office is not equipped to conduct experimentation in order to determine whether Applicant's composition differs and, if so, to what extent, from the discussed reference. Therefore, with the showing of the reference, the burden of establishing non-obviousness by objective evidence is shifted to the Applicants.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takagi et al (as cited above).

8. Takagi et al does not expressly teach the addition of 0.05 to 3 parts by weight of an organopolysiloxane blended in 100 parts by weight of the thermoplastic resin. However, Takagi et al teaches the addition of a mold release agent that can be an organopolysiloxane compound—see column 29, line 25. And per examples 21-22 in Table 3, Takagi et al teaches adding 0.1% of a mold release agent. Therefore the examiner deems that it would have been within the skill of an ordinarily skilled artisan to add at least 0.1% of a polyorganosiloxane mold release agent as taught by Takagi et al. The motivation would have been a reasonable expectation adequate mold release of the cured composition as taught by the reference in the absence of evidence to the contrary and/or unexpected results.

***Conclusion***

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to whose telephone number is (571) 272-1074. The examiner can normally be reached on Monday through Friday 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sanza L McClendon/  
Primary Examiner,  
Art Unit 1796

SMc

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